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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,285	05/19/2004	Shin-ichirou Ono	17780	6640

23389 7590 10/08/2010

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EXAMINER	
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ART UNIT	PAPER NUMBER
2871	

MAIL DATE	DELIVERY MODE
10/08/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/849,285	ONO ET AL.	
	Examiner	Art Unit	
	MICHAEL H. CALEY	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 September 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-6 and 9-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *10* is/are allowed.

6)☒ Claim(s) *1,3-6,9 and 11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Prosecution Application

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/27/10 has been entered.

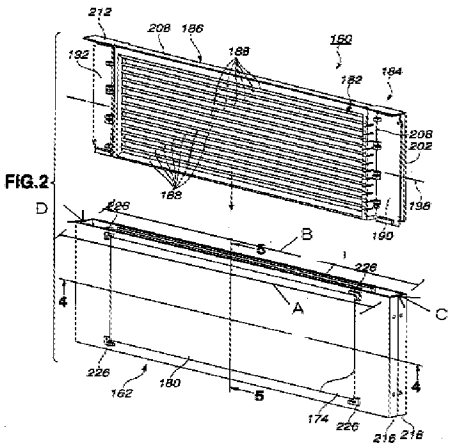
Claim Rejections - 35 USC § 112

Claims 1, 3-6, 9, and 11-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant cites Specification Page 10 lines 11-20 and Figures 1, 2, 5, and 6 as providing support for the amendment. The cited portion of the specification discusses the light shield as overlapping the aperture, but does not discuss overlap with the edge of the chassis.

Figure 2 of Applicant's Drawings are reproduced below with edges labeled A, B, C, and D. Overlap between the light shield 212 and an edge portion of the aperture and chassis is clearly shown for edges A and B. For example, Figure 5 is a cutaway of Figure 6 as shown below and overlap along the edge portion is apparent (Figure 5 elements 212, 216, and 218). No

support is found, however, for overlap along the edge portion of the aperture and chassis along edges and sides C and D. Further, the edge of element 202 in Figure 2 appears to show a straight contour with element 212, such that an overlap with the chassis at edge C would not be geometrically possible.



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 4, 9, 11-15, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou (U.S. Patent No. 7,095,457) in view of Lavi et al. (U.S. Patent No. 5,987,794 "Lavi").

Regarding claim 1, Chou discloses a backlight unit comprising:

a chassis (Figure 2 element 10) having a bay (13 and 11), wall means defining the bay, an aperture (13) opening to the bay, and an optical panel (20) that includes at least one light management feature (Column 3 lines 7-9), the optical panel having one side forming a wall portion of the wall means;

a light emitting structure (31) placed within the bay to light a two dimensional area on the one side of the optical panel, the light emitting structure having at least one linear light source (31) and a power control circuit (32) coupled to the linear light source; and

a bracket (33 and 36) for quick installation and removal of the light emitting structure through the aperture to and from the bay, the bracket having a support structure carrying the light emitting structure (Figure 2), the support structure having a frame for supporting the linear light source and a circuit mount having two portions for supporting the power control circuit (Column 3 lines 27-33), the bracket having a light shield (33) wider than the aperture (Figures 2-3; aperture size is reduced by top of structure defining

groove 11) and arranged to cover the aperture such that the edge portion of the light shield overlaps with the chassis when the bracket is positioned for installation of the light emitting structure in the bay,

wherein the bay within the chassis includes a first region for receiving the frame of the support structure and two second regions for receiving the two portions of the circuit mount of the support structure respectively (Figures 2 and 3).

Chou fails to disclose an edge portion of the light shield as overlapping all around an edge portion of the aperture and the chassis. Lavi, however, teaches an alternative light source (Figure 12 element 200 Column 5 line 62 – Column 6 line 2) having a light shield portion (220) overlapping all around an edge portion of the aperture and the chassis.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to overlap the light shield all around an edge portion of the aperture and the chassis. One would have been motivated to form the light shield portion to overlap all around an edge portion of the aperture and the chassis as an art recognized equivalent method of covering the aperture and chassis. Overlapping all around the edge portion of the aperture and the chassis would be beneficial to more effectively protect the light source and display from contaminants, such as dust.

Regarding claim 3, Chou discloses the light emitting structure as including a plurality of linear lamps (31) and a power control circuit (32) coupled to the linear light source.

Regarding claim 4, Chou discloses the frame as having a predetermined line and two sides spaced along the predetermined line, and each of the two portions of the circuit mount as extending from one of the two sides in a remote direction from the other of the two sides; and wherein, at the two sides, the frame holds two ends of each of the plurality of linear lamps respectively, and the circuit mount holds the power control circuit (Figure 2 element 30).

Regarding claim 9, Chou discloses the chassis as including a guide for the frame of the support (Figure 2 element 11) to slide relative to the chassis; and wherein the light leak prevention feature includes a second light shield arranged to cover a clearance between the frame of the support structure and the guide of the chassis (Figure 3).

Regarding claim 11, Chou discloses the chassis and the support structure as including means for bringing the bracket into firm engagement with the chassis (Figure 2 element 35).

Regarding claims 12 and 13, Chou discloses the first light management feature as a diffusing feature within the optical panel and the second light management feature as selected from a brightness enhancing film and a light diffusing film (Column 3 lines 7-9).

Regarding claim 14, Chou discloses the chassis as dividable into four sections, each having at least one frame portion providing a groove receiving one of four sides of the optical panel (Figures 2 and 3).

Regarding claims 15, 18, and 19, Chou discloses a display having the proposed backlight unit having a light control device (Column 2 line 61).

Regarding claim 20, Chou discloses the method of light source replacement further including the step of pulling the bracket out of the chassis to remove the light emitting structure for light source replacement (Figures 2 and 3).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chou in view Lavi and in further view of Yamamoto (U.S. Patent No. 6,445,373).

Chou fails to disclose the frame as including two frame halves as proposed. Yamamoto, however, teaches two frame halves interposing therebetween the two ends of each of the plurality of linear lamps, the two frame halves being of the identical structure (Figure 3 element 42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to interpose the linear lamps between two frame halves as proposed. One would have been motivated to form the frame to have two halves as a means of supporting and providing a wiring harness for the lamps (Column 6 lines 43-60).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chou in view of Lavi and Yamamoto and in further view of Nakano (U.S. Patent No. 6,545,732).

Chou as modified by Yamamoto discloses at least one of the halves as formed with a plurality of cutouts over the entire length of each of the two sides (Yamamoto: Figure 3 element 42). Chou fails to disclose a rubber mount as holding one of the two ends of each of the plurality of linear lamps. Nakano, however, teaches rubber mounts for holding the lamp in place with respect to the frame (Column 2 line 63 – Column 3 line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form rubber mounts holding an end of the lamp as proposed. One would have been motivated to form the frame with such rubber mounts to maintain positional alignment of the lamp within the housing as taught by Nakano.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou in view of Lavi and in further view of Chen et al. (U.S. Patent No. 7,150,557 "Chen").

Regarding claim 16, Chou discloses a first light control device having a first optical panel between the first light control device and the bay. Chou fails to disclose a second light control device wherein the light emitting structure is placed between the first and second optical panels. Chen, however, teaches first and second light control devices and first and second optical panels as proposed such that the light emitting structure is placed between the first and second optical panels (Figure 5 elements 54A, 58 and 60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form first and second light control devices and first and second optical panels and to place the light emitting structure between the first and second optical panels as proposed. One would have been motivated to form the second light control device and optical panel as proposed

to provide a second display panel without the need of additional backlighting electronics (Columns 1-2).

Regarding claim 17, Chou as modified by Chen discloses the light control devices as liquid crystal displays attached to the chassis (Column 2 line 31); wherein the first and second optical panels form wall portions of the wall means; and wherein the light emitting structure placed within the bay between the first and second optical panels lights two-dimensional areas as proposed (Chen: Figure 5; Chou: Figure 2).

Allowable Subject Matter

Claim 10 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to disclose or suggest the bay as including first and second regions for receiving the two portions of the circuit mount, guide spaces, and a second light shield each as proposed in claim 10.

Response to Arguments

Applicant's arguments with respect to claims 1, 3-6, 9, and 11-20 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL H. CALEY whose telephone number is (571)272-2286. The examiner can normally be reached on M-F 6:00 a.m - 2:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael H. Caley/
Primary Examiner, Art Unit 2871